



EPA Region 5 Records Ctr.



317174

August 10, 2008

Dr. Leah Evison
U. S. EPA - Region 5 (SR-6J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

**Re: Sauget Area 2 Site – October 3, 2002 Unilateral Administrative Order
(UAO) Groundwater Operable Unit
Monthly Report; July 1 - July 31, 2008 Reporting Period**

Dear Dr. Evison:

Attached is the Monthly Report for the Sauget Area 2 Site October 3, 2002 Unilateral Administrative Order (UAO) - Groundwater Operable Unit. This submittal is in fulfillment of the monthly reporting requirements of the UAO, Section XII, paragraph 62, Progress Reports. This report is for the period July 1 – July 31, 2008.

Sincerely,

Steven D. Smith
Project Coordinator

cc: Ken Bardo, - U. S. EPA
Mayor Sauget - Sauget, IL
Sandra Bron – IEPA
Mike Coffey - USFWS
Village of Sauget – c/o P. H. Weis & Associates (Attn: Brian Nelson)
Mayor Frank Bergman – Cahokia
L. Glen Kurowski - Monsanto
Cathleen Bumb – Solutia
Linda Tape - Husch Blackwell Sanders, LLP
Richard Williams – Solutia

Sauget Area 2 Site - Sauget, Illinois

October 3, 2002 UAO – Groundwater Operable Unit

Status Report

Date of Report: August 10, 2008
Period Covered: July 1 - July 31, 2008

Work Performed During the Reporting Period

Site Work

- The grass on the site was mowed during the reporting period.

Groundwater Treatment

- As agreed upon with USEPA, the Groundwater Migration Control System (GMCS) continues to be operated to maintain the total pumping rate equal to the computed inflow rate, based on the average of the gradients measured in the two existing pairs of piezometers located immediately upgradient of the Site R landfill. The system was operated in the above manner during the reporting period. However, pumping only occurred between July 14th and 27th because of the high river stage during the rest of the month.
- During the week of July 7th, it was observed that extraction well EW-2 would only produce a maximum flow of about 80 gpm. On July 14th, it was noted that the actuator would not open and a fuse was replaced. The well shut down again on July 23rd and would not restart. The motor on the actuator was checked on July 29 and was found to be faulty. A new motor has been ordered and will be installed as soon as possible. In the interim, the well can be put into service if required. However, the flow rate cannot be reliably controlled below approximately 80 gpm until the new motor is installed. This should not affect system performance since EW-2 is an installed spare and is only used during very low flow conditions. Until the motor is replaced, one of the other extraction wells can be used for low flow conditions.
- Extraction well EW-1 shut down on July 23rd. The pump and motor were checked on July 24th and both were replaced on July 25th.
- Routine maintenance was carried out on the cooling units in the extraction well panels on July 31st. The coils and filters were cleaned and refrigerant was added.

- The signal from piezometer PZ-4IN became erratic on June 23rd and the signal channel was shut down until the problem could be identified. The transducer was replaced on July 15th and the piezometer was put back into service.
- The second quarter 2008 groundwater samples collected from the performance monitoring wells were being analyzed during the reporting period. Collection of surface water and sediment samples in the Mississippi River scheduled to occur in March was again postponed because of the high river stage. Collection of these samples will be rescheduled when the river stage declines sufficiently to ensure that groundwater is discharging to the river.
- Water level and pumping data for the reporting period are attached.

Schedule

The documents listed above will be used to establish that the Remedial Action at Site R is complete.

Submittals During Reporting Period

- The validated analytical results from the first quarter 2008 groundwater monitoring event were submitted on July 1st.

Work Scheduled for Next Reporting Period

- Continue operating the extraction system to maintain the total pumping rate equal to the computed inflow rate.
- Monitor the Mississippi River stage in order to determine an appropriate time for collection of the first 2008 semi-annual surface water and sediment samples and collect the samples when groundwater begins to discharge to the river.
- Complete the analyses of the second quarter 2008 groundwater samples from the performance monitoring wells and begin to validate the data.

PUMPING DATA

GROUNDWATER MIGRATION CONTROL SYSTEM

JULY 2008 DAILY AVERAGE PUMPING RATES AND GROUNDWATER LEVELS

Date/Time		PUMPING RATE					SWL
		Computed Q	Total Q	EW-1 Q	EW-2 Q	EW-3 Q	
07/01/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	418.33
07/02/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	418.05
07/03/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	417.66
07/04/2007	Daily Average	0.00	5.09	1.60	1.66	1.83	417.25
07/05/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	416.69
07/06/2007	Daily Average	0.00	8.92	2.83	3.05	3.04	415.73
07/07/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	414.17
07/08/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	412.24
07/09/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	410.41
07/10/2007	Daily Average	0.00	4.96	2.90	2.07	0.00	409.12
07/11/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	408.33
07/12/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	407.49
07/13/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	406.55
07/14/2007	Daily Average	6.95	7.57	0.00	7.57	0.00	405.72
07/15/2007	Daily Average	25.86	27.21	0.04	27.17	0.00	404.66
07/16/2007	Daily Average	86.50	94.26	31.12	32.42	30.73	403.30
07/17/2007	Daily Average	172.43	165.99	82.19	0.68	83.12	401.95
07/18/2007	Daily Average	224.46	225.70	112.82	0.00	112.88	401.50
07/19/2007	Daily Average	259.38	260.97	130.50	0.00	130.48	400.67
07/20/2007	Daily Average	318.47	316.78	158.36	0.00	158.43	399.67
07/21/2007	Daily Average	350.90	351.07	175.52	0.00	175.55	398.12
07/22/2007	Daily Average	404.62	285.68	80.75	0.00	204.93	399.04
07/23/2007	Daily Average	280.33	186.18	0.00	0.00	186.18	400.25
07/24/2007	Daily Average	155.00	156.55	0.00	0.00	156.55	401.48
07/25/2007	Daily Average	160.60	153.80	32.45	0.00	121.35	401.54
07/26/2007	Daily Average	130.55	137.17	73.80	0.00	63.36	400.98
07/27/2007	Daily Average	38.53	38.31	38.31	0.00	0.00	403.94
07/28/2007	Daily Average	2.85	0.00	0.00	0.00	0.00	405.83
07/29/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	407.34
07/30/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	408.09
07/31/2007	Daily Average	0.00	0.00	0.00	0.00	0.00	409.11

GROUNDWATER MIGRATION CONTROL SYSTEM

JULY 2008 DAILY AVERAGE PUMPING RATES AND GROUNDWATER LEVELS

		GROUNDWATER LEVELS											
Date/Time		PZ-5U	PZ-5D	Delta	PZ-6U	PZ-6D	Delta	PZ-7U	PZ-7D	Delta	PZ-8U	PZ-8D	Delta
07/01/2007	Daily Average	408.49	409.53	1.04	407.75	407.78	0.03	407.36	407.72	0.36	408.22	410.20	1.98
07/02/2007	Daily Average	408.56	409.55	0.98	407.85	407.88	0.03	407.45	407.81	0.36	408.30	410.21	1.91
07/03/2007	Daily Average	408.43	409.44	1.01	407.80	407.82	0.02	407.40	407.75	0.35	408.24	410.11	1.88
07/04/2007	Daily Average	408.55	409.38	0.83	407.85	407.83	-0.02	407.46	407.78	0.32	408.23	410.02	1.79
07/05/2007	Daily Average	408.38	409.25	0.87	407.79	407.81	0.02	407.43	407.76	0.33	408.19	409.83	1.63
07/06/2007	Daily Average	408.22	409.00	0.78	407.71	407.73	0.02	407.34	407.65	0.31	408.06	409.58	1.52
07/07/2007	Daily Average	407.86	408.51	0.65	407.44	407.48	0.04	407.10	407.40	0.30	407.78	409.02	1.24
07/08/2007	Daily Average	407.43	407.90	0.48	407.09	407.13	0.03	406.78	407.06	0.28	407.40	408.34	0.94
07/09/2007	Daily Average	406.98	407.31	0.34	406.73	406.74	0.00	406.42	406.68	0.26	406.97	407.64	0.67
07/10/2007	Daily Average	406.60	406.87	0.26	406.41	406.42	0.00	406.11	406.36	0.24	406.56	407.06	0.51
07/11/2007	Daily Average	406.35	406.55	0.20	406.16	406.16	-0.01	405.85	406.09	0.24	406.28	406.65	0.36
07/12/2007	Daily Average	406.09	406.27	0.18	405.94	405.95	0.00	405.64	405.87	0.22	406.03	406.30	0.27
07/13/2007	Daily Average	405.80	405.92	0.12	405.67	405.68	0.00	405.38	405.60	0.22	405.72	405.88	0.16
07/14/2007	Daily Average	405.51	405.57	0.06	405.40	405.38	-0.02	405.10	405.31	0.21	405.43	405.46	0.03
07/15/2007	Daily Average	405.15	405.19	0.04	405.07	405.04	-0.02	404.77	404.97	0.20	405.09	405.05	-0.03
07/16/2007	Daily Average	404.63	404.71	0.08	404.68	404.64	-0.04	404.39	404.56	0.17	404.67	404.54	-0.13
07/17/2007	Daily Average	404.34	404.23	-0.11	404.31	404.26	-0.05	404.04	404.19	0.15	404.30	404.07	-0.23
07/18/2007	Daily Average	403.89	403.77	-0.13	403.94	403.87	-0.07	403.69	403.82	0.13	403.96	403.66	-0.29
07/19/2007	Daily Average	403.44	403.30	-0.14	403.54	403.45	-0.09	403.30	403.40	0.11	403.55	403.21	-0.34
07/20/2007	Daily Average	402.95	402.82	-0.13	403.12	403.00	-0.12	402.87	402.96	0.09	403.11	402.70	-0.40
07/21/2007	Daily Average	402.20	402.38	0.17	402.73	402.61	-0.12	402.49	402.57	0.08	402.71	402.26	-0.45
07/22/2007	Daily Average	402.48	402.17	-0.31	402.49	402.35	-0.14	402.20	402.29	0.09	402.45	401.94	-0.51
07/23/2007	Daily Average	402.44	402.22	-0.22	402.50	402.37	-0.13	402.19	402.29	0.10	402.41	402.06	-0.35
07/24/2007	Daily Average	402.61	402.39	-0.22	402.54	402.43	-0.11	402.24	402.37	0.14	402.52	402.39	-0.12
07/25/2007	Daily Average	402.69	402.46	-0.23	402.64	402.55	-0.09	402.36	402.52	0.15	402.70	402.57	-0.13
07/26/2007	Daily Average	402.67	402.52	-0.15	402.72	402.62	-0.10	402.53	402.67	0.15	402.91	402.79	-0.12
07/27/2007	Daily Average	403.04	402.96	-0.09	403.02	402.93	-0.09	402.84	403.02	0.19	403.29	403.45	0.16
07/28/2007	Daily Average	403.51	403.54	0.03	403.44	403.37	-0.07	403.27	403.47	0.21	403.80	404.17	0.37
07/29/2007	Daily Average	403.93	404.06	0.13	403.83	403.79	-0.04	403.66	403.88	0.22	404.24	404.83	0.59
07/30/2007	Daily Average	404.24	404.44	0.20	404.09	404.07	-0.02	403.92	404.16	0.23	404.53	405.22	0.69
07/31/2007	Daily Average	404.56	404.82	0.26	404.35	404.33	-0.01	404.18	404.42	0.24	404.83	405.65	0.81

GROUNDWATER MIGRATION CONTROL SYSTEM

JULY 2008 DAILY AVERAGE PUMPING RATES AND GROUNDWATER LEVELS

Date/Time		GROUNDWATER LEVELS							
		PZ-1_OUTSI	PZ-1_INSI	PZ-2_OUTSI	PZ-2_INSI	PZ-3_OUTSI	PZ-3_INSI	PZ-4_OUTSI	PZ-4_INSI
		DE	DE	DE	DE	DE	DE	DE	DE
07/01/2007	Daily Average	413.61	407.03	416.35	408.47	415.80	407.65	413.56	
07/02/2007	Daily Average	413.52	407.13	416.03	408.50	415.55	407.69	413.45	
07/03/2007	Daily Average	413.30	407.10	415.75	408.40	415.20	407.57	413.29	
07/04/2007	Daily Average	412.98	407.02	415.27	408.49	414.86	407.67	413.06	
07/05/2007	Daily Average	412.66	407.01	414.76	408.41	414.35	407.58	412.73	
07/06/2007	Daily Average	412.06	406.86	413.85	408.24	413.48	407.46	412.13	
07/07/2007	Daily Average	411.00	406.58	412.39	407.98	412.08	407.14	411.13	
07/08/2007	Daily Average	409.72	406.16	410.60	407.56	410.39	406.74	409.95	
07/09/2007	Daily Average	408.46	405.69	408.87	407.12	408.73	406.29	408.76	
07/10/2007	Daily Average	407.57	405.34	407.64	406.75	407.53	405.89	407.82	
07/11/2007	Daily Average	407.00	405.06	406.88	406.49	406.81	405.61	407.24	
07/12/2007	Daily Average	406.43	404.81	406.10	406.26	406.04	405.37	406.69	
07/13/2007	Daily Average	405.77	404.52	405.20	405.97	405.17	405.05	406.03	
07/14/2007	Daily Average	405.21	404.21	404.49	405.64	404.51	404.74	405.46	
07/15/2007	Daily Average	404.57	403.83	403.70	405.23	403.74	404.30	404.82	404.76
07/16/2007	Daily Average	403.83	403.28	402.72	404.73	402.77	403.78	403.11	403.86
07/17/2007	Daily Average	403.16	402.72	401.86	404.23	401.92	403.33	401.48	403.07
07/18/2007	Daily Average	402.53	402.16	401.17	403.75	401.24	402.84	401.14	402.18
07/19/2007	Daily Average	401.91	401.62	400.46	403.24	400.55	402.36	400.45	401.42
07/20/2007	Daily Average	401.27	401.05	399.67	402.68	399.77	401.80	399.72	400.53
07/21/2007	Daily Average	400.64	400.58	398.88	402.25	399.00	401.33	398.50	399.93
07/22/2007	Daily Average	400.46	400.67	398.76	402.21	398.89	400.99	399.17	399.92
07/23/2007	Daily Average	400.73	401.37	399.32	402.52	399.39	401.09	399.06	400.08
07/24/2007	Daily Average	401.44	402.06	400.44	402.61	400.47	401.27	399.57	400.39
07/25/2007	Daily Average	401.57	402.14	400.61	402.60	400.67	401.51	400.12	400.86
07/26/2007	Daily Average	401.80	402.09	401.01	402.59	401.03	401.79	400.93	401.61
07/27/2007	Daily Average	402.95	402.64	402.71	403.07	402.70	402.35	403.54	403.04
07/28/2007	Daily Average	404.14	403.24	404.38	403.64	404.34	402.85	404.94	403.58
07/29/2007	Daily Average	405.17	403.70	405.83	404.10	405.73	403.33	405.77	404.09
07/30/2007	Daily Average	405.75	404.01	406.60	404.42	406.45	403.65	406.37	404.44
07/31/2007	Daily Average	406.49	404.33	407.52	404.71	407.38	403.95	407.01	404.75